

**REMARKS**

This Amendment and Response to Non-Final Office Action is being submitted in response to the non-final Office Action mailed June 1, 2005. Claims 1-26, 28, and 29 are pending in the Application. Claims 1-3, 5, 8-12, 14, 17-19, 21, and 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. (U.S. Patent No. 6,088,141) in view of Fee et al. (U.S. Patent No. 5,914,794). Claims 4, 6, 13, 15, 20, 22, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. and Fee et al. as applied to Claims 1, 10, 17, and 26, and further in view of Tada et al. (U.S. Patent No. 5,532,862). Finally, Claims 7, 16, 23, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. and Fee et al. as applied to Claims 1, 10, 17, and 26, and further in view of Cohen et al. (U.S. Patent No. 4,736,359).

In response to the above rejections, Claims 1, 10, 17, and 26 have been amended to further clarify the subject matter which Applicants regard as the invention, without prejudice or disclaimer to continued examination on the merits. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. Based upon the amendments, reconsideration of the Application is respectfully requested in view of the following remarks.

**Rejection of Claims 1-3, 5, 8-12, 14, 17-19, 21, and 24-26 Under 35 U.S.C. 103(a) –**  
**Merli et al. and Fee et al.:**

Claims 1-3, 5, 8-12, 14, 17-19, 21, and 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. (U.S. Patent No. 6,088,141) in view of Fee et al. (U.S. Patent No. 5,914,794).

In response to this rejection, independent Claims 1, 10, 17, and 26 have been amended to recite:

1. A system for detecting faults in an optical network, comprising:
  - a first node and a second node; and
  - an amplifier node coupled between the first node and the second node, the amplifier node configured to detect a fault on an optical link connecting the amplifier node and the first node and generate a fault report upon detection of the fault, ***the fault report comprising information regarding a planned restoration event***, the amplifier node is further configured to directly forward the fault report to the second node, the second node configured to detect faults that occur on the optical link connecting the amplifier node to the second node.
10. A method for detecting faults in an optical network having an amplifier node coupled between a first node and second node, comprising:
  - detecting a loss-of-signal condition on an optical link carrying optical signals from the first node to the amplifier node;
  - causing the amplifier node to generate a fault report reporting occurrence of the loss-of-signal condition, ***the fault report comprising information regarding a planned restoration event***; and
  - directly forwarding the fault report to the second node, the second node configured to detect faults that occur on the optical link connecting the amplifier node to the second node.
17. An optical network comprising:
  - a plurality of switching nodes connected to one another, at least one switching node capable of switching traffic; and
  - a plurality of amplifier nodes;
  - wherein:
    - at least one amplifier node is coupled between selective pairs of switching nodes; and
    - the least one amplifier node is configured to detect a fault on an incoming optical link carrying optical signals into that amplifier node, generate a fault report upon detection of the fault, ***the fault report comprising information regarding a planned restoration event***, and directly forward the fault report to a neighboring node.
26. An amplifier node for use in an optical network, comprising:
  - an input signal power detector configured to monitor input power of an incoming optical link received by the amplifier node; and
  - control logic configured to:
    - evaluate output from the signal power detector to determine if a loss-of-signal condition thereby indicating a fault on the incoming optical link; and

generate a fault report reporting the loss-of-signal condition, ***the fault report comprising information regarding a planned restoration event;***

wherein the control logic is further configured to directly forward the fault report to a switching node to allow the switching node to initiate a switching action.

Thus, independent Claims 1, 10, 17, and 26 have been amended to recite the subject matter of paragraph [51] of the application, which states “[t]he OSC channel also permits the nodes to communicate messages on planned restoration events to each other, thereby permitting the nodes to coordinate their actions.” “For example, node 2 may send a signal announcing to its neighbors that it is about to initiate an equipment switch that will cause a short disruption in traffic through node 2.” “This information will alert node 1 to not interpret a short disruption in upstream traffic as a line fault.”

Merli et al. do not teach or suggest generating and/or forwarding a fault report comprising information regarding a planned restoration event. Merli et al. teach only a network management system 116 (see Figures 1, 2, and 4; column 4, lines 48-53) connected to each of the nodes present, this network management system 116 only receiving information from each node regarding whether that node is normal, a head node, or a tail node (see Figures 6-9). There is no suggestion of generating and/or forwarding a fault report comprising information regarding a planned restoration event.

Fee et al. do not remedy this deficiency, teaching only the detection and reporting of existing faults (see, for example, Abstract), nor do Tada et al., Cohen et al., or any other reference cited by Examiner.

Therefore, Applicants submit that the rejection of independent Claims 1, 10, 17, and 26 under 35 U.S.C. 103(a) as being unpatentable over Merli et al. in view of Fee et al. has now been overcome and respectfully request that this rejection be withdrawn. Because Claims 2, 3, 5, 8, 9, 11, 12, 14, 18, 19, 21, 24, and 25 are dependent from independent Claims 1, 10, 17, and 26, Applicants submit that the rejection of these

Claims has also now been overcome and respectfully request that this rejection be withdrawn.

**Rejection of Claims 4, 6, 13, 15, 20, 22, and 28 Under 35 U.S.C. 103(a) – Merli et al., Fee et al., and Tada et al.:**

Claims 4, 6, 13, 15, 20, 22, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. and Fee et al. as applied to Claims 1, 10, 17, and 26, and further in view of Tada et al. (U.S. Patent No. 5,532,862).

The above arguments apply with equal force here.

Therefore, Applicants submit that the rejection of Claims 4, 6, 13, 15, 20, 22, and 28 under 35 U.S.C. 103(a) as being unpatentable over Merli et al. and Fee et al. as applied to Claims 1, 10, 17, and 26, and further in view of Tada et al., has now been overcome and respectfully request that this rejection be withdrawn.

**Rejection of Claims 7, 16, 23, and 29 Under 35 U.S.C. 103(a) – Merli et al., Fee et al., and Cohen et al.:**

Claims 7, 16, 23, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Merli et al. and Fee et al. as applied to Claims 1, 10, 17, and 26, and further in view of Cohen et al. (U.S. Patent No. 4,736,359).

The above arguments apply with equal force here.

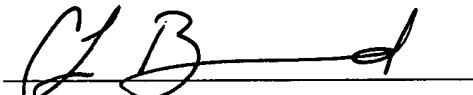
Therefore, Applicants submit that the rejection of Claims 7, 16, 23, and 29 under 35 U.S.C. 103(a) as being unpatentable over Merli et al. and Fee et al. as applied to Claims 1, 10, 17, and 26, and further in view of Cohen et al., has now been overcome and respectfully request that this rejection be withdrawn.

**CONCLUSION**

Applicants would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

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